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Sean Mellino

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Sabine Balthasar, et al.

Serial No. : 10/590,601 (Conf. No. 8967)

Filing Date : August 24, 2006

Examiner : Thurman Michael Wheeler

Group Art Unit : 4131

Title : Carrier System in the Form of Protein-Based Nanoparticles  
for the Cell-Specific Enrichment of Pharmaceutically  
Active Substances

Attorney File : RO4304US (#90568)

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Reply to Office Action Issued June 26, 2009

Dear Sir:

Claims 1-18 are pending in the instant application. The Examiner has concluded that restriction to one of the following groups is necessary:

- I. Claims 1-5, 15 and 16, drawn to a carrier system for the cell-specific, intracellular enrichment of at least one pharmacologically active substance, wherein said carrier system is present in the form of protein-based nanoparticles.
- II. Claim 6, drawn to a use of a carrier system for the cell-specific, intracellular enrichment of at least one pharmacologically active

substance, wherein said carrier system is present in the form of protein-based nanoparticles producing a medicament for enrichment of a pharmaceutically active substance to/in specific cells.

- III. Claims 7-14, 17 and 18, drawn to a method for producing a carrier system in the form of protein-based nanoparticles for the cell-specific enrichment of at least one pharmacologically active substance.

The Examiner explains in the Office action that the inventions listed as Groups I – III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features. In particular, the Examiner states that the special technical feature of Groups I – III is the protein-based nanoparticles but that the protein-based nanoparticles of claims 1-18 do not present a contribution over the prior art. The Examiner refers to Artemov, et al. “MR Molecular Imaging of the HER-2/neu Receptor in Breast Cancer Cells using Targeted Iron Oxide Nanoparticles” and states that the protein-based nanoparticles of claims 1-18 do not involve an inventive step. The Examiner refers to Artemov, et al. for teaching the use of supraparamagnetic nanoparticles that are bound to a biotinylated anti-HER2 antibody following thiolation by neutravidin. Thus, the Examiner states that the nanoparticles in the reference target HER-2positive as does the carrier system in the form of nanoparticles in the present application. Therefore, the Examiner concludes that Groups I – III do not share a special technical feature and the claims are not so linked within the meaning of PCT Rule 13.2 so as to form a single inventive concept, which means unity between Groups I – III is broken.

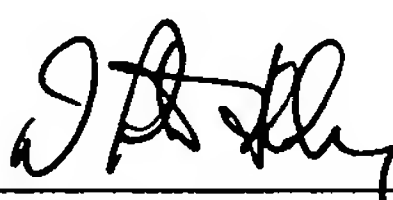
The Applicants respond to the instant restriction requirement, *with traverse*. Nevertheless, the Applicants hereby elect the claims of Group I (which reads on claims 1-

5, 15 and 16) which are drawn to a carrier system for the cell-specific, intracellular enrichment of at least one pharmacologically active substance, wherein said carrier system is present in the form of protein-based nanoparticles, for further prosecution on the merits thereof.

The Examiner is invited to call the undersigned if there are any remaining issues to be discussed which could expedite the prosecution of the present application.

Respectfully submitted,

Date: July 23, 2009

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